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Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353. Revised Manual 10f

Specifications

| Overall Dimensions | 8-5/8" L with handle |
|--------------------------------|---|
| Sanding Pad | 3/8" Thick x 5-3/4" Diameter Adhesive-backed Paper Re- quired |
| Air Inlet | 1/4" - 18 NPT |
| Inlet Screen | 20-Mesh or Finer Required |
| CFM @ 90 PSI | 8.0 CFM |
| Recommended Operating Pressure | 90 PSI |
| No-Load Speed | 10,000 RPM |

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

- 1. Keep work area clean. Cluttered areas invite injuries.
- 2. **Observe work area conditions**. Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
- 3. **Keep children away**. Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
- 4. **Store idle equipment**. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- 5. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- 6. Dress properly. Do not wear loose clothing or jewelry as they can be caught REV 071 SKU 90288 For technical questions, please call 1-800-444-3353. Page 2

in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

- 7. **Use eye protection**. Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
- 8. **Do not overreach**. Keep proper footing and balance at all times. Do not reach over or across running machines.
- 9. **Maintain tools with care**. Keep tools clean for better and safer performance. Follow instructions for changing accessories. Inspect tool periodically and if any part appears broken or damaged, have it repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
- 10. Disconnect power. Disconnect tool from air compressor when not in use.
- 11. **Remove adjusting keys and wrenches**. Check that adjusting wrenches are removed from the tool or machine work surface before connecting it to its power source.
- 12. **Avoid unintentional starting**. Be sure the air compressor switch is in the Off position when not in use and before connecting to this tool. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
- 13. **Stay alert**. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- 14. Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic. When sanding these materials extra care should be taken to avoid inhalation and minimize skin contact.
- 15. **Check for damaged parts**. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
- 16. **Guard against electric shock**. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
- 17. **Replacement parts and accessories**. When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.

- 18. **Do not operate tool if under the influence of alcohol or drugs**. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 19. Use proper size and type extension cord. If an extension cord is required for the air compressor (not included), it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool.
- 20. **Maintenance**. For your safety, service and maintenance should be performed regularly by a qualified technician.

Note: Performance of the compressor that powers this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect compressor performance.

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

*Lead from lead-based paints

- *Crystalline silica from bricks and cement or other masonry products
- *Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

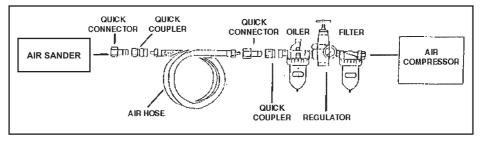
Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

When unpacking, check to make sure all parts listed on Page 7 are included.

If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

Air Connection



Note: Air Compressor is not supplied. You will need an Air Compressor with a minimum rating of one horsepower, 4 CFM delivery at 90 PSI, and a 12 Gallon Air Tank. Refer to the above illustration for complete air connection setup.

You may use Quick Connectors, Quick Couplers, (not supplied) and Air Regulator as shown in the Diagram above. Do not connect Couplers directly to the Air Inlet (2). Doing so will increase the overall bulk of the tool and strain the Inlet Threads.

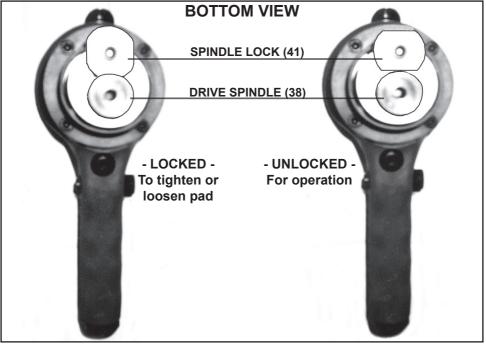
Be sure to follow all safety precautions as listed on Pages 2-4 of this manual and the instruction manual for the Air Compressor being used.

This air tool requires lubrication during operation. For best results, it is recommended to have an oiler and water filter in line with the air supply as shown in the diagram above. This will extend the life of the tool.

To Attach Sanding Paper And The Pad:

- 1. Ensure that the Pad is **firmly** screwed onto the Drive Spindle (38). The Spindle Lock (41) turns to engage the Drive Spindle (38), allowing the Pad (44) to be threaded on securely. Turn the Spindle Lock (41) back out of the way before use. *If the Orbital Hub is still in the locked position during use, then the Sander will not operate properly.* (See Bottom View, next page.)
- 2. The Sander **only** uses 6" *diameter, PSA Stick,* (self-sticking) Sanding Paper (not included). Make sure to attach the Sanding Paper <u>firmly</u> to the Pad (44).

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Operation

- 1. Familiarize yourself with all safety precautions before operation.
- 2. Tighten all work pieces to your work surface with a clamp or vise so that both of your hands are free to operate the Sander.
- 3. Set the air compressor's pressure regulator to 90 PSI. Connect the Sander to the air compressor's hose at the Air Inlet. Use the Air Pressure Regulator (19) to fine tune or adjust the air pressure further.
- 4. Check to be sure all attachments are secure before turning on the tool.
- 5. Grip the Handle with your left hand and the Housing (1) with your right (reverse if you are left-handed). Depress the Trigger (16) with your right hand to turn the tool on. Allow the motor to reach its full speed before sanding. Make sure the Air Sander is running properly. Make sure the Pad is rotating evenly and all parts appear to be working properly. Always maintain a firm grip with both hands when operating this tool.
- 6. **NOTE:** If the Sander will not turn properly when it contacts the workpiece, disconnect the air supply and verify that the Spindle Lock (41) is in the unlocked position. **(See illustration above.)**
- 7. To begin sanding, approach the material at an angle between 15-30° to the Pad. Maintain that angle until you are finished sanding. Always keep a safe

distance from the sanding pad while the Sander is operating. Do not force the Pad or apply too much pressure. If the Pad slows down as you work with your material, you are applying too much pressure. Always keep your body and clothing a safe distance from the running Air Sander.

8. Once you have turned the Sander off, continue to hold onto the tool with both hands until the Pad stops spinning completely and before you set it down. Disconnect Sander from compressor when finished.

Maintenance

Be sure to follow all recommended steps for Maintenance as listed on Pages 3-4.

Sanding Pads must be clean and sharp for maximum sanding efficiency and safety. Do not use cracked or torn Sanding Pads.

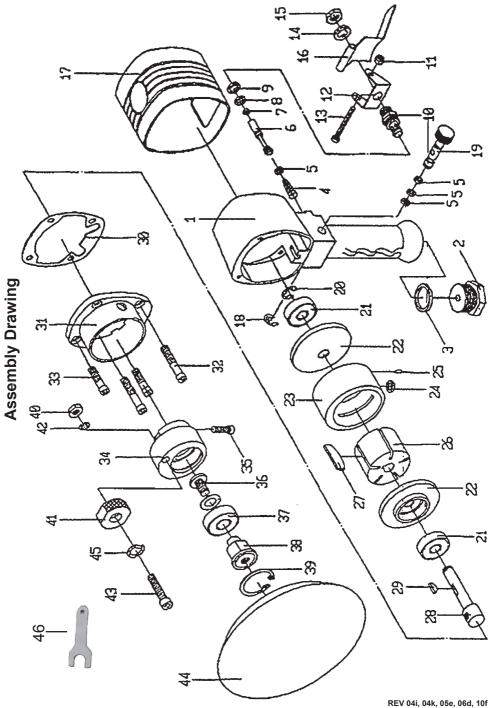
| Part | Description | Q'ty | Part | Description | Q'ty | Part | Description | Q'ty |
|------|---------------|------|------|---------------|------|------|---------------|------|
| 1 | Housing | 1 | 17 | Rubber | 1 | 33 | Screw | 2 |
| 2 | Air Inlet | 1 | 18 | Retainer Ring | 1 | 34 | Balancer | 1 |
| 3 | O-Ring | 1 | 19 | Air Regulator | 1 | 35 | Screw | 1 |
| 4 | Spring | 1 | 20 | Retainer Ring | 1 | 36 | Screw | 1 |
| 5 | O-Ring | 4 | 21 | Bearing | 2 | 37 | Bearing | 1 |
| 6 | Valve Stem | 1 | 22 | End Plate | 2 | 38 | Drive Spindle | 1 |
| 7 | O-Ring | 1 | 23 | Cylinder | 1 | 39 | Retainer Ring | 1 |
| 8 | O-Ring | 1 | 24 | O-Ring | 1 | 40 | Сар | 1 |
| 9 | O-Ring | 1 | 25 | Pin | 1 | 41 | Spindle Lock | 1 |
| 10 | Valve Body | 1 | 26 | Rotor | 1 | 42 | Washer | 1 |
| 11 | Screw | 1 | 27 | Rotor Blade | 5 | 43 | Screw | 1 |
| 12 | Bracket | 1 | 28 | Work Spindle | 1 | 44 | Pad | 1 |
| 13 | Trigger Screw | 1 | 29 | Woodruff Key | 1 | 45 | Washer | 1 |
| 14 | Screw | 1 | 30 | Rear Gasket | 1 | 46 | Wrench | 1 |
| 15 | Сар | 1 | 31 | Rear Cover | 1 | | | |
| 16 | Trigger | 1 | 32 | Screw | 2 | | | |

Parts List

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DIS-TRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.



For technical questions, please call 1-800-444-3353.

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90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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